

DOCKET NO.: JANS-0073 (JAB1714USPCT)
Application No.: 10/518,887
Office Action Dated: May 17, 2007

PATENT

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) Process for the production of N-(2,6-dimethyl-phenyl)-2-piperazin-1-yl-acetamide, obtained from the reaction of piperazine with N-haloacetyl-2,6-xylidine, characterized in that the process comprises the subsequent steps a) through f):
 - a) reacting piperazine with N-haloacetyl-2,6-xylidine in a molar ratio of piperazine to N-haloacetyl-2,6-xylidine between about 1/1 and about 6/1 in an aqueous solvent in which has been dissolved an about equimolar amount of HCl relative to the molar amount of piperazine;
 - b) separating the solid formed in step a) from the reaction mixture by filtration to create a filtrate;
 - c) neutralizing the filtrate;
 - d) extracting the filtrate with a solvent which is not or only slightly miscible with the aqueous solvent mentioned in step a);
 - e) crystallizing the N-(2,6-dimethyl-phenyl)-2-piperazin-1-yl-acetamide from the solvent mentioned in step d); and
 - f) separating the solid obtained in step e) from the solvent mentioned in step d).
2. (Original) Process according to claim 1 in which N-haloacetyl-2,6-xylidine is N-chloroacetyl-2,6-xylidine.
3. (Previously presented) Process according to claim 1, characterized in that the molar ratio in step a) is about 3/1 piperazine to N-haloacetyl-2,6-xylidine and the equimolar amount of HCl relative to the molar amount of piperazine is about 3.
4. (Original) Process according to claim 1, characterized in that solvent for extraction (step d) and crystallization (step e) is toluene.
5. (Original) Process according to claim 1, characterized in that the separation method in step b) and step f) is filtration.

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6. (Currently Amended) Process for the production of N-(2,6-dimethyl-phenyl)-2-piperazin-1-yl--acetamide, obtained from the reaction of piperazine with N-chloroacetyl-2,6-xylidine, characterized in that the process comprises the subsequent steps a) through f):

- a) reacting piperazine with N-chloroacetyl-2,6-xylidine at about 80° C.degrees. C. in water in a molar ratio of about 3/1 piperazine to N-chloroacetyl-2,6-xylidine, the reaction mixture also containing 3 equivalents an equimolar amount of HCl relative to the molar amount of piperazine;
- b) filtering the reaction mixture at about 60° C.degrees. C;
- c) neutralizing the filtrate up to a pH equal to about 10;
- d) extracting the filtrate with toluene at about 70° C.degrees. C;
- e) crystallizing the N-(2,6-dimethyl-phenyl)-2-piperazin-1-yl-acetamide from toluene;

and

- f) filtering the solid N-(2,6-dimethyl-phenyl)-2-piperazin-1-yl-acetamide.

7. (Canceled)